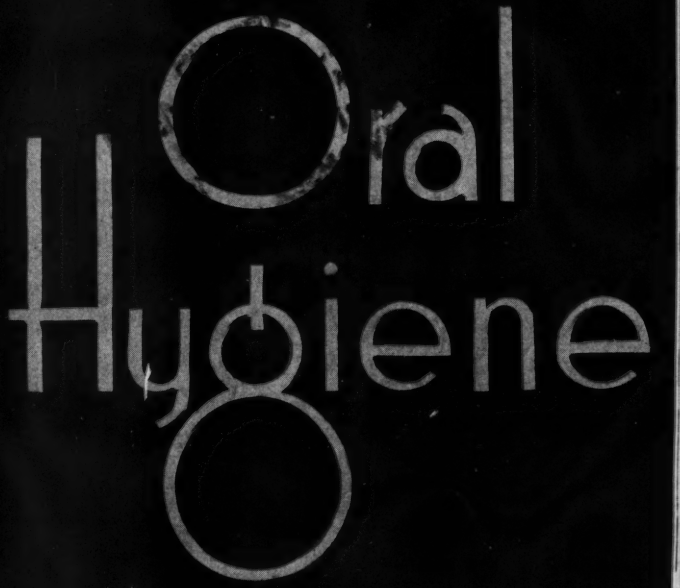
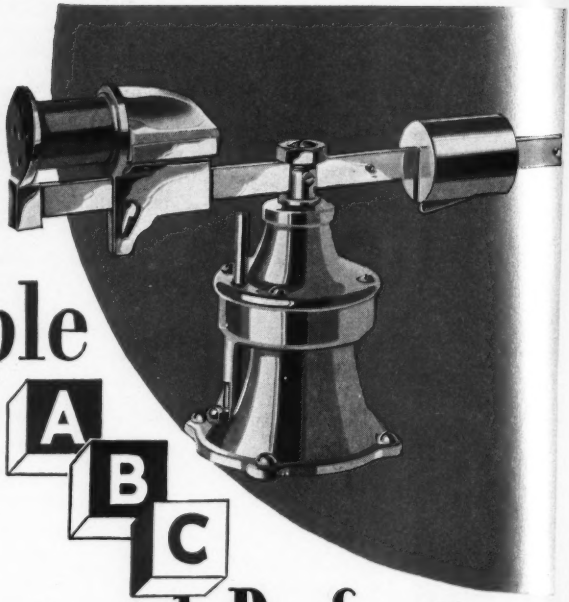
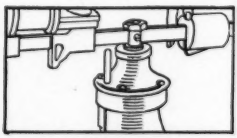

Oral
Hygiene

It's as Simple as A B C To Cast with Perfection



CASTING is the simplest step in the production of an inlay, bridge or denture when the Perfection Centrifugal Casting Machine is used. The spring is wound by a few turns of the arm; the gold is melted in the separate crucible, always in full control of the operator; a slight movement of the arm determines the fluidity of the gold and releases the stop pin; in less time than it takes to tell it, the cast is made.



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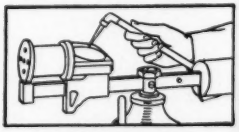

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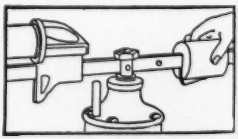

RELEASE THE SPRING

The Cleveland Dental Manufacturing Company

CLEVELAND, OHIO, U.S.A.

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ORAL HYGIENE

MAY, 1937

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WEATHER CONTROL
in the Dental Office

by R. L. LASATER, D.D.S.

WHEN WE FIRST became interested in air conditioning our dental suite, the thought we had in mind primarily was the physical comfort and well-being of the patients and the operators. The idea of being able to work long hours in the summer without the discomfort that accompanies high temperatures and have patients cool and comfortable while in our offices on the hottest day appealed to us strongly. Not until after the system had been in actual operation did we begin to realize that conditioned air has an important influence on the technical aspects of dentistry throughout all seasons.

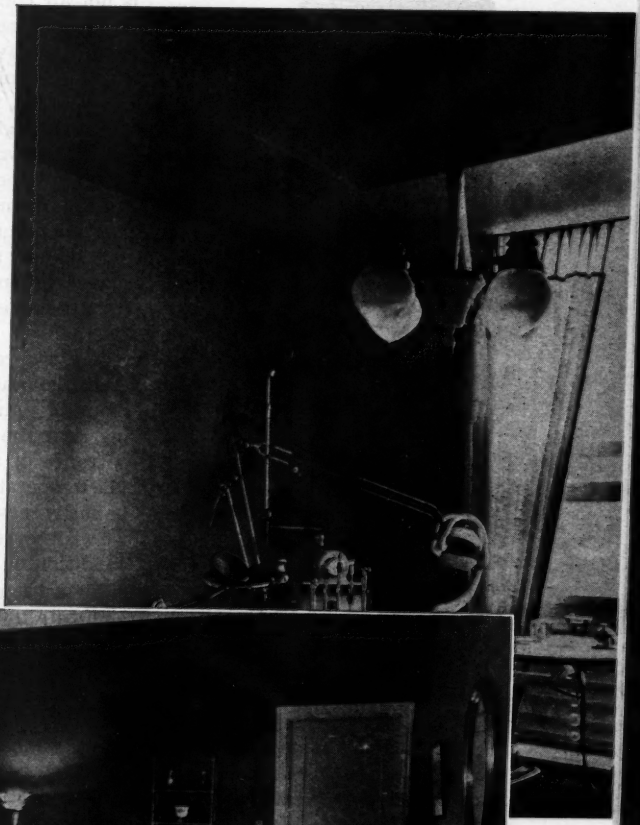
From the physical point of view, it is easy to explain the value of air conditioning. For a good many years scientists have been doing extensive research on the relation of moisture, heat, and air motion to bodily comfort and efficiency. They have found that automatic control of temperature is not sufficient for comfort. Humidity is just as important, and correct circulation of clean air is also essential for physical well-being.

Modern air conditioning offers all these factors. It creates ideal environment for the body, because there is a definite relationship between air control and the physiological functions of the body. To be normal the body must have a temperature of 98.6°. As the food taken into the body is oxidized, it creates heat to maintain this temperature as well as vitality, energy, and strength. Under normal conditions, our bodies produce more heat and energy than they require. Our normal temperature can be maintained only if the excess heat is radiated to surrounding air and objects. Of course, this is readily accomplished in winter, but in summer we are unable to throw off this surplus heat, and the result is excessive perspiration and that "hot, sticky" feeling.

In order to have comfort in summer in the dental office we should be able to regulate the humidity as well as the temperature and the distribution of air. These factors must be considered together. Suppose, for instance, that the thermometer stands at 80° on a day in July. If the humidity is 50 per cent of the maximum and there is a slight breeze, neither you nor your patients will experience any particular discomfort. The temperature of the

In the attractive reception room (below) the patients of H. J. Combs, R. L. Lasater, and R. W. Johnson are made comfortable in all kinds of weather by conditioned air. The air is supplied through the small opening shown near the ceiling.

In the operating room air is drawn from the outside into the air conditioning system. The ducts through which the air passes in no way detract from the appearance of the room but are concealed near the ceiling, as shown in the accompanying photograph.



air being lower than that of the body the excess warmth can be absorbed, and the air not being saturated with moisture can absorb some from the body. But, should the temperature suddenly go to 98° and the humidity to 100 with no breeze, both you and your patients would immediately suffer heat prostration. Of course, we rarely have such extreme conditions outside of the tropics, but there are so many variations and combinations of temperature and humidity that weather control offers the only means of having ideal conditions at all times in the dental office.

In line with this reasoning, we had an air conditioning system installed last June in the dental suite occupied by myself and my associates. Although the building in which our offices are located is not air conditioned, we found it was a comparatively simple matter to have the refrigerating apparatus placed in a small closet about three by four feet. Ducts through which the conditioned air was to pass were attached to the ceiling of the operating room, as shown in the accompanying photograph. They took up only a limited amount of space and in no way detracted from the appearance of the room. In each of the five operating rooms, two retiring rooms, x-ray room, laboratory, and reception room an eight by ten inch opening near the ceiling permits the entrance of the conditioned air. The temperature in the rooms can be easily regulated, and whenever we wish to we can shut off the air conditioning in any one room.

All last summer we operated the complete system. That is, the air was dehumidified, cooled, cleansed to remove dust, dirt, bacteria, and pollen, and circulated properly. During the winter, however, we shut off the refrigerating part of the system, but the air was still being humidified, cleansed, and distributed evenly through the offices. In these months since our air conditioning system has been in operation, I have become conscious of its value in more ways than I had ever anticipated.

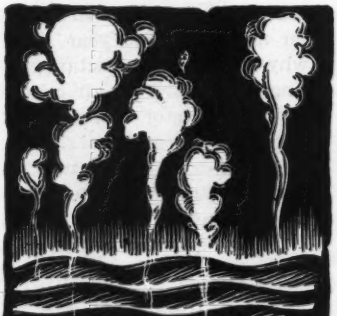
Naturally the cool, comfortable rooms were greeted with enthusiasm by patients. Day after day, through the hot summer, it was a great satisfaction for me to hear their varied expressions of pleas-

ure and relief. Sinking down into the chair, they would relax and exclaim, "How lucky you are." "You have no idea how hot it is outside." "Well, this *is* a relief." "I wish I could stay here all day." And when you hear those comments in a dental office they are significant. Just recall how many unpleasant associations there are with dentistry, and you will realize what it means to be able to create a feeling of physical comfort that almost overshadows the thought of the dental experience.

Another reaction of my patients that pleased me was the fact that, because the offices were air conditioned, their confidence in us increased. Instinctively, they seemed to feel that our offices were now modernized in all respects. Without saying so they were convinced that we had the most up-to-date dental equipment available. And from the comments that filtered back to me I know that many of my patients went from my office to their bridge parties and other social gatherings and spread the news about the air conditioned office they had just been visiting.

I do not, of course, care to make any definite statement on the relation of air conditioning to increased business in our offices. There are many factors that operate to stimulate business, and it is unwise to trace all new patients to one particular factor. This I can say, however, without exaggeration. In July, 1936, the month following the installation of the air conditioning apparatus, I treated more patients than any other month in that year. That is why I have little hesitancy in saying that I can see air conditioning as a factor that may aid us in overcoming seasonal slumps, long a bug-bear to dentists. It definitely eliminates one additional discomfort for the dental patient and does away with that worn out excuse for postponing summer dental appointments: "It's too hot today. I guess I'll wait for cooler weather."

Besides pleasing the patient, there is no doubt in my mind that air conditioning has increased the efficiency of the dentists in our offices. It was only a day or two after the system began to operate that one of the dentists said to me, "Do you know I don't feel nearly so tired at the end of a day



as I did before?" Naturally if an operator doesn't begin to lag on summer afternoons and struggle through his last appointments, he is going to be more efficient. This must mean better satisfied patients and a consequent increase of business.

When you have the proper temperature and humidity in your office at all times, it also means that your materials will be kept in better condition, they will be easier to handle, and you can do better work. Frankly, I hadn't given much thought to this aspect of air conditioning in relation to dentistry. I was surprised myself last summer to find how much effect weather control had on our materials.

It had been our experience, as no doubt it had been yours, that summer heat hastened the setting time of zinc oxide and silicious cements. Waxes and modeling compound were difficult for us to manipulate in hot weather because their expansion was increased. The excess humidity we encountered often in summer affected the setting of plaster. Now we find all these materials respond normally. We can at last do our work under the precision conditions essential for modern dentistry.

Temperature control, as you know, is important in modern casting techniques, ceramics, and the manipulation of the thermoplastic denture bases. Along with the need for such precision in the laboratory procedures is the need for equal precision in operative procedures. Our modern dental equipment had given us the tools for operative finesse, but the weak link in the chain has been our inability to control temperature in the dental operating room. The behavior of our waxes and cements has varied from day to day and fluctuated with the readings of the thermometer. Now that air conditioning has given us absolute control of temperature and humidity, we have weather control in the dental office, which means that we can flatten out the peaks and valleys of behavior of our plastic materials. It is a great satisfaction to be able to control the conditions under which precision work with sensitive materials is performed.

In regard to the general health of our staff I have noticed an im-

provement this winter. The incidence of colds is much less, presumably because there are no drafts from open windows, the membranes of the nose and throat are not irritated by dried-out air, and the air is constantly being cleansed and distributed evenly through the entire suite.

During the past summer it was a great advantage to be able to have the air free from irritating pollens. One of the dentists in our office found he was entirely relieved of distress from hay fever while at work during the hay fever season.

To make certain that there would be no inconvenience from extremes of temperature in the hot weather we kept the temperature in the offices between 10 and 12 degrees colder than out-of-doors. With particular emphasis, I want to say that this is something about which we should be careful in the dental office, because it is possible that sensitive persons will be irritated rather than pleased by your air conditioned office if it is too cold. My recommendation to any dentist is not to permit his office to be more than 15 degrees colder than the outside temperature at any time.

As to other practical results I have noticed following the use of conditioned air, it is now much easier to keep the offices clean, drawers open more readily in damp weather, and doors are not inclined to stick. Our equipment is also kept in better condition because it is protected from the destructive action of air that is too dry and air that is too damp. It is quieter, too, in our offices. With the windows closed both summer and winter, we can eliminate the irritating noise of honking automobile horns, screeching brakes, trains, and barking dogs; disturbances that were fatiguing both to our patients and operators.

Of all the aspects of air conditioning, however, there is nothing that pleases me more than the fact that we can now perform all dental operations under really aseptic conditions. When our windows were open and dust blowing in, this was not possible. Our use of conditioned air makes it easy to eliminate grime, soot, and bacteria from the air and have hygienic conditions in our dental offices throughout the year.

636 *Church Street*
Evanston, Illinois

Atlanta Acts to Promote
CHILD HEALTH

PART I

by J. G. WILLIAMS, D.D.S.*

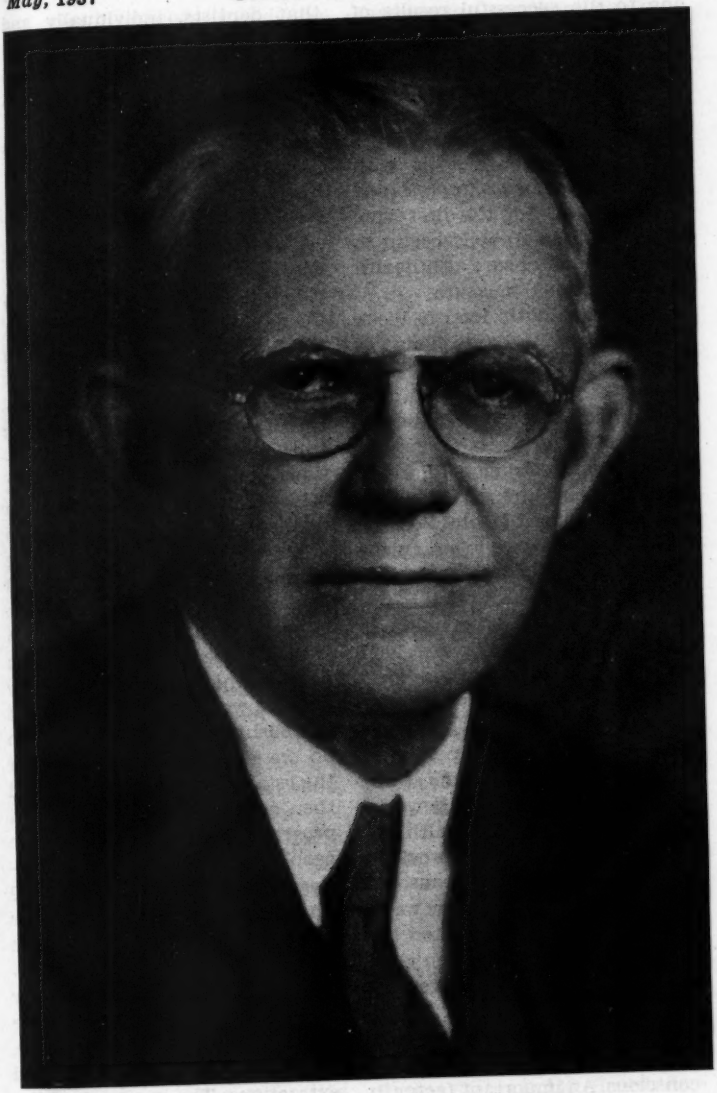
IN 1921, LIKE many other men of my profession, I was thinking and talking dental health for children. Several years prior to this time, I had gone with some of my associates to one Atlanta school to examine children's teeth. The deplorable dental conditions had been reported to the City Council and nothing had been done about the report. Mr. Cator Woolford, a patient and close friend of mine, was interested in my accounts of the mouth conditions among these children, and through a donation of $1500 made possible the first demonstration school dental program in Georgia.

Fifteen years ago, 96 per cent of Atlanta school children had defective mouths, which proved first that the public had little conception of dentistry as a health service; second, the dental profession had no conception of education as a professional obligation. Of the 40,000 white children in the Atlanta public schools only 22 per cent had defective teeth as revealed by examination in 1936.

Doctor Willis A. Sutton of the Atlanta Schools, a superintendent who has pioneered in the idea of not only making health the first objective but the first attainment in education, organized Grant Park School for demonstration purposes. When our plans were definite, the idea was presented to and approved by the Fifth District Dental Society, and a committee was appointed, of which I was chairman. The results obtained in this school of 679 pupils served not only as a demonstration but as a challenge to the entire school system.

If this was good for one school, why not for all? With Emerson, I agree that "Nothing great was ever achieved without enthusiasm." In 1925 it seemed to Atlanta a great achievement that approximately 40,000 school children had certificates from dentists stating that all necessary dental corrections had been made. And this achievement was the result of enthusiasm and hard work on the part of school superintendent and teachers, Parent-Teacher Associations, and the Fifth District Dental Society. The march of events lead-

*Member, Georgia State Board of Health.



CATOR WOOLFORD

ing to the successful results of the program would not be so unusual today. But in 1925, the methods used and awards given, such as holidays for classes attaining 100 per cent dental corrections and for schools with similar attainments, represented a novel idea. For the first time schools and the public began to recognize dental care as a health and educational measure.

In 1928, Mouth Health Week was observed in Atlanta. This was an extensive educational campaign for children, parents, and the public on the importance of the mouth and teeth. Sponsored by the Atlanta Council of Parents and Teachers and supported by the Fifth District Dental Society, schools, and all civic organizations, all worked for "One hundred per cent perfect teeth in the Atlanta schools." Motion pictures were shown and talks were given in every class of every school; civic organizations devoted that week to the discussion of mouth health; every newspaper gave the program publicity; and stores devoted their show-windows in the interest of mouth health activities. Speakers were provided for Parent-Teacher sponsored meetings every night of the week, and contests were promoted between schools and between classes. Every known agency was enlisted in the program for Mouth Health Week. Children and parents were made mouth health conscious. An important factor in the success of that effort and all dental programs then and now is that dentists, individually and collectively, worked, but in cooperation with lay groups. The idea grew only as it was accepted by the public and the dentist unaided could not have reached the public so effectively.

A Substitute for Clinics

The little clinic, including one dentist and two hygienists, for which we had petitioned the City Council and which operated in the City Hall, could not begin to care for even the charity patients. The solution to the problem of getting 30,000 children's teeth corrected was an educational campaign, with the slogan: *"Go to your own dentist."* As a dentist who is concerned with child welfare and at the same time the welfare of the dental profession, I want to urge the importance of making children "dental office minded rather than dental clinic minded." The only possible way to do this is by not establishing clinics. How often do we as a profession sponsor the establishment of a clinic and then grieve, criticize, and call a program a failure because the people patronize the clinic instead of the private practitioner? The dentists of Atlanta cared for both pay and charity cases. The greatest number of cases ever admitted to the clinic during any year has been 3,000 and those only for emergency toothache, simple restorations, cleaning and extractions. The one part of the program that has not expanded is the clinic. Today one dentist

and two hygienists spend the school hours at the schools in inspection and educational work, and the afternoons and Saturday mornings at the clinic.

Today we have a school population that is mouth conscious, and that recognizes the dentist as an important factor in promoting health, and thus seeks the service of the dentist in his office. The dental certificate has come to be just as important to the child as any other record of school work. The days when children tried your patience with crying because of fear and pain when they came to your office are far in the past. These children must have the certificate to take to school, and if you dare forget it you hear these words: "Doctor, give me my certificate." Only the class room teacher, encouraged by her principal and superintendent, could have created such an attitude. Parents and children now understand the importance of the six-year molar. Upon inquiry, many of the dentists tell me that within the last ten years they can hardly remember extracting a six-year molar for a school child, and certainly this is true in my own practice. From January to December 1936, 3,106 cases were treated in the clinic for any type of service. The following information concerning those cases is significant, I think. Remember, these cases of necessity represent the lowest economic and social strata in the city. Of 3,106 cases:

109 six-year molars were extracted

10 children lost two six-year molars

89 children lost one six-year molar

7 twelve-year molars were extracted

Forty-nine of the children having molars extracted had come into the school system within the year.

The point I wish to drive home to dentists is that dental health education is essential to our profession. The school is the medium through which we must work, and it is the duty and privilege of every dentist to make the necessary contribution to a school program before he and the dentists who are to follow can receive the benefits.

1003 *Medical Arts Building*
Atlanta, Georgia

HOW THE GEORGIA PROGRAM FUNCTIONS

PART II

MOUTH HEALTH ACTIVITIES in Georgia are by no means confined to Atlanta City Schools. Since 1923 and 1924, through the State Department of Health, we have made scattered efforts, beginning with a mouth hygiene unit detailed to Georgia by the United States Public Health Service to visit 17 counties from September, 1923 through July, 1924.

The records show that 5,606 children were examined. The next progressive step in the state program was the employment, in the Division of Child Hygiene, of an oral hygienist whose services for three years were offered to counties to assist with dental inspections and educational programs. There was little chance for such a program to expand to include Georgia's 159 counties and 500,000 white school children. The only possible way to reach so large a group and scattered territory was to organize all dentists, all schools, and all Parent-Teacher Associations.

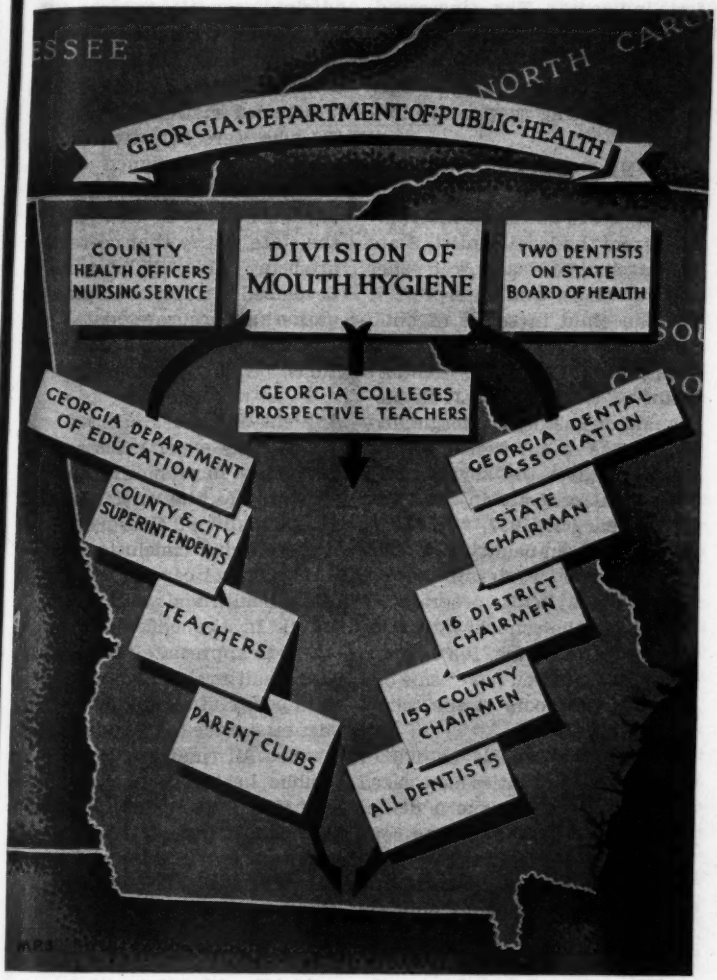
It was in 1932 that the present plan by which the state program is worked was adopted. The young woman employed by the State Department of Health as Supervisor is an educator with a splendid general educational background with special training in health education, but no technical knowledge of dentistry. Her activities are confined to education and organization. The Georgia Dental Association has become interested in the public health program in Georgia. The State Board of Health is composed of eight physicians, two pharmacists, two dentists, and two laymen. Doctor T. F. Abercrombie, Director of Public Health, says: "Dental health is not only a dental problem but a health problem of the first rank," and therefore he gives proper support to a state wide program. Serving as a member of the State Board of Health and also as Chairman of the Health Education Committee of the Georgia Dental Association, it has been my duty and privilege to advise with Doctor Abercrombie at every stage of the program.

The outstanding feature of the Georgia Dental Health Education Program is that it is a cooperative effort of the Georgia Department of Health, Georgia Dental Association, State Department of Education and State Parent-Teacher Association, with each organization doing the work for which it is best prepared. The Supervisor has organized and properly correlated dental health with the specialized program of each group. So well has this been done that it would be difficult for a casual observer to know in what organization the program originates. Again I remind you that this program had its conception within the dental profession but reaches the public through health and educational agencies.

The program has been broadened to include *inspection*, *correction*, and *training*, with each group doing the work for which it is best prepared.

Inspection: This is carried on by local dentists visiting the schools upon invitation and arrangement by school superintendents.

Correction: Local dentists perform necessary services. Children are notified and encouraged by the school to have defects corrected. Local dentists cooperate with the school and Parent-Teacher Association in providing



The dental health program of Georgia is based on co-operative efforts of all interested groups, as shown here.

for indigents. The increased number of pay patients following the educational program of schools enables the local dentists to aid in giving service to indigents.

Education and *Training*: Supplied through the school. The teacher seeks authentic information from the local dentist, State Department of Health, and other organizations, and interprets it for the child in terms of child learning.

Speaking from the dentist's point of view, Doctor J. H. McDonald of Eastman, Georgia, living in one of our typically rural counties, gives the keynote of a successful program in his letter of February 25, 1937: "You completely sold our county school superintendent, Professor Bowen, on our dental health program. He is visiting the schools with Doctor Reuben and me. It's easy for the dentists if you have some one to open the doors of the school for us."

Today the schools in 115 of Georgia's 159 counties have asked local dentists to make a dental inspection to show existing conditions. The schools have notified parents, and are providing the encouragement to children and parents to have corrections made. For the past two years in Fulton County, where the county schools, although in and near Atlanta, are a separate system, 150 dentists have inspected 16,000 white children in one day. This year the same dentists assisted the dentists in the three adjoining counties to inspect 15,000 additional children. After the first inspection, the Superintendent of Fulton County Schools announced that 4,000 of the 13,737 who were defective brought the certificates signed by the dentist. This was without benefit of school clinic. Dentists all over the state testify that corrections are being made. We have not yet developed a successful plan for gathering accurate data concerning the number of corrections.

Conclusions

From my experiences and observations in promoting the programs of the Atlanta City Schools and of Georgia, I offer the following conclusions:

(1) Dental care is essential to child health and welfare.

(2) In the education of the child to appreciate the economic and health value of dentistry lies the powerful means of bringing dental service to the public.

(3) All matters concerning public health should be related to the Department of Public Health. Therefore, dentists must take an active interest in community and state health programs.

(4) The school and its allied agencies are the media through which health information is disseminated. Therefore, dentists should contribute to an educationally sound dental health program.

(5) The dental profession is the only group that can give au-

thentic dental information to the public.

(6) The dentist is the only person who can give the service which education is training the public to demand.

ORAL HYGIENE IN THE SCHOOL CURRICULUM

by WILLIS A. SUTTON*

PART III

IT WOULD BE DIFFICULT to estimate the value of the Atlanta Oral Hygiene Program in the lives and character of the children of Atlanta. I have good evidence to support the fact that the Oral Hygiene Program has made a saving of at least $150,000 to the Atlanta Board of Education through better health, better attendance, and more regular promotions through the grades. To try to estimate the value in personality development in the individual child is a far more complicated task, however.

The average weekly attendance throughout the city school system before this program was about 85 per cent of the number registered. This was raised in many cases to 98 per cent in attendance and an average of at least 95 per cent, thus giving us a 10 per cent better attendance. Five thousand more children attended school every day in the city of Atlanta as a result of our health program.

This consciousness of better health reacts on the life of the child as a great stimulus to better living. Mouth cleanliness inspires a child to follow other hygienic measures. When a child receives a certificate that all the work necessary in his mouth is completed, he is proud of the condition of his teeth. The possession of the dental certificate encourages him, and causes him to have a better conception of himself and his life. It reacts upon his whole personality, and many a child, who has had an inferiority complex, has overcome this deficiency through the fact that he has secured a dental certificate.

The effect of our program in character building has been to remove many of the causes of delinquency and to give to the child himself a feeling of superiority and of ability to achieve for himself the success which he desires. I believe that objective data would support this statement. Therefore, I think I am justified in saying that the Oral Hygiene Program of the Atlanta public schools, originating with the cooperation of the School Department with the Fifth District Dental Society, has given to the children of Atlanta better health, a

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*Superintendent of Atlanta City Schools, Past President of the National Educational Association.

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greater opportunity to advance in their studies, a better conception of human personality, and has resulted in character improvement for all the students concerned.

COMMENTS ON THE GEORGIA PROGRAM

PART IV

DOCTOR M. D. COLLINS, State School Superintendent, who at the beginning of each school year sends a letter to all school superintendents, has this to say about the Georgia plan:

I am glad that it has been my privilege to endorse and cooperate in the work of the Georgia Department of Health. Within recent months, the Georgia Dental Association, the State Department of Health, and the State Department of Education have jointly sponsored a plan whereby every child in Georgia may, without any cost whatsoever receive mouth inspection. Many of our cities and counties have availed themselves of this free service.

The health of the children should be our first objective. No child can learn easily and quickly, and no person can completely live to the fullest, if handicapped by unsound health. Hence, it is exceedingly worth while that all schools avail themselves of the fine service which dentists are offering. The contribution that dentists are making to the school children of Georgia is both physical and educational. While their work is primarily with the teeth, the benefits are more far reaching, in that the preservation of the teeth means better health and a more receptive mind. Without this dental contribution the minds of many of our children would be sluggish and would not be receptive to that training our teachers are endeavoring to impart. It affects the whole character and careers of more than one hundred thousand who are being treated annually, and this is only a token of what we may expect when all our dentists and our school officials cooperate to carry this service to all of Georgia's nine hundred thousand school children.

Doctor Willis A. Sutton and Atlanta School Children (left).

Quoting Mrs. Charles D. Center, Parent-Teacher President, who sends a letter from the Board of Managers to all Parent-Teacher presidents:

The Dental Health Education Program which was conducted throughout the State last year was very good, and we want to continue this fine work. To make this program effective throughout the State, Parent-Teacher associations must participate to the fullest extent. Let us cooperate with the Department of Health by giving every child a dental inspection and then promote a follow-up program urging parents to use this information so that our children may have better mouth health, which means better general health. This important information should be presented to the entire membership. Will you devote a part of one program to this important work?

Mr. Walter Brown, Acting Director of the Agricultural Extension Service, the organization through which 52,000 4-H Club boys and girls learn the impor-

tance of building and protecting teeth writes:

Health, beauty, and to a certain extent, success, depend upon good teeth. Fortunately, much can be done at the present time to aid boys and girls in building sound teeth and healthy gums. Therefore, it is important that everyone know something about the formation of the teeth, the effect of food on them, the importance of proper care, and the various troubles which beset them. To provide such information, we have prepared a bulletin. That it will aid 4-H Club members in building the best possible teeth is the earnest desire of the Extension service.

FEDERAL HEALTH PROJECTS

Among the many undertakings by the Works Progress Administration[1] the health projects of the federal work program are the only ones which show over the past year a diminution of workers. This is due in part to their increasing reemployment by private and public agencies.

During the depression, while the breakdown of private health services was going on, the federal health projects were being expanded. In 1934-35 more than 6000 public health and home nurses and some 25,000 other health workers were given employment. In February, 1936, the work was still going on with over 15,000 men and women employed in medical, dental, nursing, and other health projects.

Mr. Harry L. Hopkins, WPA Administrator, believes that the educational effects of such a nation-wide federal health project are more important than the treatment services rendered. In his opinion the work demonstrated, "that people can be educated in hygiene and nutrition and child care, so that they themselves can bear to a vastly increased extent the responsibility for keeping themselves and their families in a state of health."

[1]Hopkins, H. L.: Government Aid During the Depression to Professional, Technical and Other Service Workers, Washington, D. C., 1936.

STALIN
from the Dentist's Chair

by CORNELIUS VANDERBILT, JR.*

"—AND WHILE I WAS lying there on my rough cot one evening, I heard a great commotion at the other end of the hall. Looking up, I saw a lot of men just outside my cell door. They were lugging along my dentist chair, my valuable stainless-steel instruments, my magnifying glasses, and all my other paraphernalia—"

"Ouch, that hurts," I said.

"It couldn't hurt, sir," said Dr. Jedelowitz. "Why, it isn't even near the nerve! Now, just let me run a little light bur around that place and you'll feel like a new man."

The trouble was, I didn't want to feel like a new man. It was bad enough to go to a dentist in Moscow anyway, without feeling like a new man. But the American Embassy had recommended Dr. Jedelowitz, emphasizing that he had "modern American methods."

It had begun to hurt in Honolulu three months before. I couldn't tell which one it was. Besides, I didn't care much; I was having too good a time learning to surf-board. Only occasionally, when I was sucking an extra juicy papaya, was there a sharp little twinge. My last night at the Royal Hawaiian, friends got a dentist out of bed and dragged him to his office. He x-rayed them all and admonished me: "The ones you think are going to be bothersome aren't as bad as the ones that look all right."

That was good news. But it didn't do me much good when the twinge became acute the night before we were going to climb Fuji. I didn't sleep at all. I was jumpy and nervous, the motor road was narrow, and the chauffeur didn't care and drove like the devil. When the road stopped, we got out with our ropes and pickaxes and hob-nailed boots. I just couldn't go on; the twinge was now a throb. The others thought me cowardly; they made pointed remarks. But I stayed behind and sipped iced seaweed tea.

In Shanghai, the throb became a quiver. Our guide took us down "Dentist's Alley," a long, dirty street in which are located half a thousand or more of them. Each dentist sits under a shabby umbrella. Each victim sits upon a red plush chair. First, his arms and legs are strapped down; then the dentist pries open his jaw

*Reprinted in part, with permission, from Town & Country, page 36, January, 1937.

with a piece of rough jade and goes to work. Removing a tooth, he inserts the knuckles of his first and middle fingers and yanks the darn thing out. The victim may be screaming with pain, but the dentist simply laughs, accompanied by a squeaky victrola playing sing-song Chinese airs.

Over in Vladivostok, the quiver accentuated itself into a positive tremor. It takes ten days for the streamlined Trans-Siberian Express to get from Vladivostok to Moscow. Eight of the 114 passengers spoke English and all eight had a try at dentistry with yours truly. They stretched me out on the hard, narrow seat and hung onto my arms and legs. Then they took a metal pencil, sterilized it in boiling water from one of the Wagon-Lits samovars, and tapped each tooth. The next procedure was to fill an eyedropper with hot and cold water in turn. This identified the two offenders, although I nearly strangled when the water went down my windpipe. Then someone got the cook to boil cloves into a syrup. Cotton was dipped in it and stuffed into both teeth, which were then strapped with adhesive tape. It was in this condition that I finally reached Moscow and became a patient of Dr. Jedelowitz.

The bur commenced buzzing, and I held onto the sides of the chair.

"—And then," the doctor continued, "and then, they opened my cell door and moved all the machinery in. A corporal of the guard told me to get up at once and begin work. They'd even brought me a brand-new, white office uniform, hot water, and sterilized soap. Why, do you know, Mr. Wanderbilt, I hadn't washed my hands in hot water in five months, I'd been dragged out of bed one night, kicked downstairs, thrown into a big black van with bars on it, and driven off to the Gay-Pay-Oo city prison, just like any common thief!"

"Hey!" I yelled.

"All right, all right," he said. "I got a bit excited. I always do when I tell this story."

The drill began buzzing again. "Half an hour after they'd connected my dental paraphernalia with the electricity, they blew out all the lights in the prison. A terrible howl went up from the other 2,000 or more men who were cooped up like I had been."

"Eah," I mumbled.

"Well, sir, a little while after the lights came on, my cell door was opened again, and I was told to bow low. When I straightened up, who should stand in front of me but the great Stalin himself!

" 'Quick, Tovarich,' he said, 'I have a pain in my right upper wisdom tooth. I want to know why. They tell me you're the best dentist in Moscow, now that they've executed Dykaroff. They tell me that the diplomatic corps have been patronizing you for a long time. They tell me that you have modern American methods.' "

"Hey, there!" I yelled out. "It

hurts like hell!"

"My dear gentleman," said Dr. Jedelowitz, "of course it does. I expected it to. I just reached the head of the nerve canal. What else could you expect?" His pained look was eloquent.

"It was easy to see what was wrong with the great dictator. He'd had bad dentistry performed upon him somewhere, but I couldn't say so. You know, sir, we aren't supposed to publicly criticize anyone else's work in Russia, provided we are in the same profession. Besides, I thought about poor Dykaroff and wondered why they'd done away with him. If I'd been a younger man, I suppose I should have been scared to go to work on Comrade Stalin. But I've worked on so many in his cabinet and so many in the diplomatic corps that names just mean nothing to me any more.

"Well, sir, Stalin came to visit me in my cell for nearly a month, and I grew to know him quite well. He's the bravest man I ever worked on. He never gripped the arms of the chair—just relax, Mr. Wanderbilt — although I could tell by the dilation of his pupils just how much I hurt him. When I asked if it hurt, all he'd say was 'Go on, Tovarich. There is much to be done.' Then I would go on drilling or curetting. Sometimes he stayed in my chair two hours on end. After he was through, he would say to the guards, 'Give that man a little more time out in the sunlight tomorrow.' But as it was winter,

Cornelius Vanderbilt as he left New York for California.

and there is hardly any sun in Moscow in winter, I never got very much out of it, except a lot more brutality from the guards, who thought I'd become the dictator's pet.

"Well, one night my big opportunity arrived. Stalin hadn't been to see me in more than a week. They roused me out of a sound sleep by kicking me in the belly. One of the guards said, 'Put on your things and come with us right away.' My apparatus and I were carted down and thrown

headfirst into the black van. A few minutes later they stopped at the inner court of the Kremlin. It was lit by candles; they didn't have electricity in the Kremlin at that time. A big, brown limousine stood near us; the chauffeur and I arranged the apparatus and presently Tovarich Stalin and many members of his cabinet came out."

I bellowed, "Gee whiz, that hurts! I'm not Stalin, you know. I've got much more sensitive nerves."

"All right, Mr. Wanderbilt, we'll approach it from a different direction this time. I just want to get a little medicine in it so that you'll be all right until you get home."

He went on in his sing-song voice. "Well, we two, Stalin and I, got into the back seat of that car. It rolled out across the moat, through Red Square, past Lenin's tomb and St. Catherine's cathedral.

" 'Salute our founder, Comrade,' said Stalin, as we passed the tomb. Then he leaned back and pointed to one of his lower front teeth. 'See what's the matter with that one,' he ordered. It was dark in the car, and I couldn't see very well, but I monkeyed around until I found out what the matter was. 'I think you've got a growth on it,' I said. 'Funny thing to have,' he replied. 'How shall we go about it?'

"He always said 'we' when he talked to me, Mr. Wanderbilt. Well I told him I thought he'd better have it out before the growth spread. He didn't seem to like that though. He said he still had all his teeth and didn't want to have to wear plates. 'They're too Oriental,' he added, 'or maybe too American. All the capitalists have false teeth, you know; even Henry Ford and Alfred Sloan, they tell me.' I didn't know who he was talking about, but I said to him, 'Look at the pictures of Mrs. Roosevelt. She's a handsome woman with hers.' "

I nearly bit off his fingers at that. "I don't think Mrs. Roosevelt has false teeth, Dr. Jedelowitz," I said.

"Don't you really? I was sure she had. Well, sir, I never did take that tooth out of Stalin's mouth, but in time I wore the growth off, though it took me the better part of three months to do it. You see, he took me out to his place in the country and set me up in a couple of rooms over the old stable, and used to come down there at night to let me work on him. We played two-handed solitaire together, and once in a great while he brought some of his intimates and we played whist.

"He came over one afternoon and told me to dismantle my paraphernalia. 'I'm going to live in your quarters a while, Tovarich,' he told me. 'I have some English visitors coming to see me, and it wouldn't look well if I were to receive them in a big house. We're going to board it up for a while. They'll find a place for you somewhere else.'

"Well, the place they found for

me was in a hencoop back of a manure pile. But it didn't last long. By that time I would have done almost anything for the old man. When I got back into my quarters again, he said to me one day, 'Jedelowitz, why were you imprisoned?'

"I answered right back and told him what they had told me afterwards. You see, Mr. Wanderbilt, my wife is a German woman. After Hitler came into power, they wouldn't let her leave Germany to come to me. Our two children were living with her in Berlin. So every week I used to send her whatever I could save. Hitler's men found that she was receiving money sent out of Russia. Now, you know, it's a crime to send out of the country 'national money,' so I was violating a Russian law in trying to keep my children alive in Germany. The Hitler idiots said my wife was violating a law receiving Russian money there. She was thrown into prison in Berlin, and I was thrown into prison here. What became of our poor little children I never learned.

"Well, sir, for the first time since I'd been working on him, I saw tears come into Stalin's eyes. He got right up out of the chair, with the sterilized bib around his neck still, and pressed a button. A servant brought him some paper. Stalin wrote on it, giving me a full pardon, and next day I was back here in my office again. I've been here ever since. The only thing I can't do, Mr. Wanderbilt, is to charge any patient more than two rubles for any amount of work I do on them.

"I'm through now, Mr. Wanderbilt. Your nerve will die in due course. Please give me two rubles, sir; it's been a pleasure to help you out."

A ruble Intourist rate is worth 20 cents; Russian rate, 1½ cents.

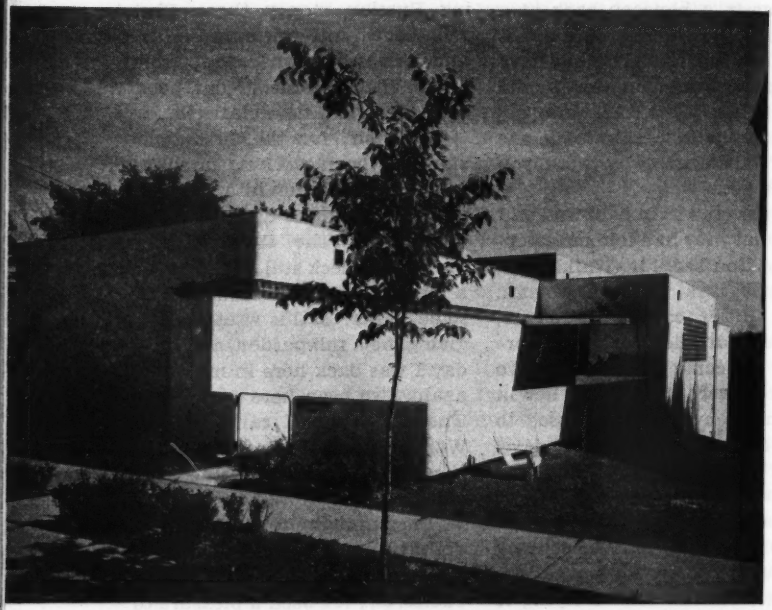
News Bulletin from Moscow: Apparently the troubles of Stalin's dentist are not yet over. Under date of April seventh, a news story reported the arrest for the third time in three years of Vasili Samoilovitch Yudelovitch, presumably the dentist of a similar name referred to in this article by Cornelius Vanderbilt. According to the story, he has been taking care of virtually the whole foreign colony.

The reason for his arrest is not given, although it was suggested that he might have accepted foreign exchange in payment for his services. Police sealed the apartment in which Yudelovitch had been practicing dentistry.

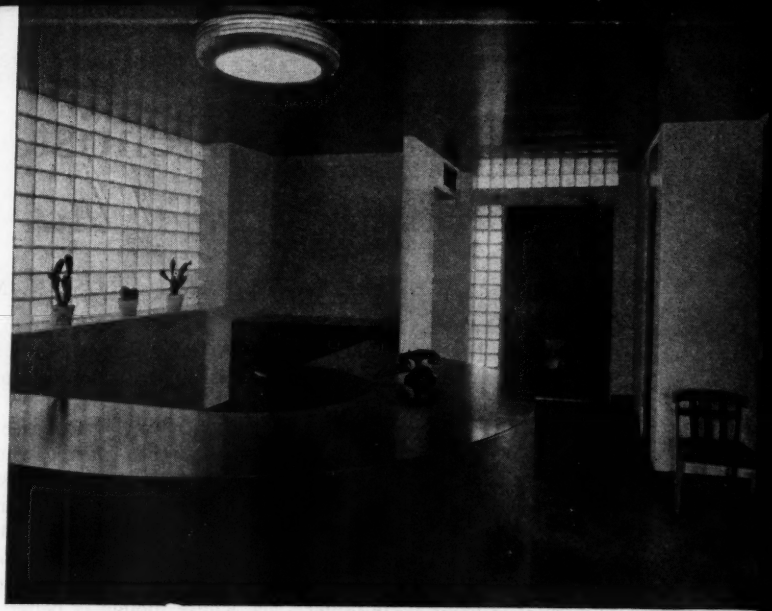
Among the diplomats, the arrest of Yudelovitch caused serious embarrassment. As a consequence, two American vice-consuls will go to Riga, Latvia, to have the dental service begun by Yudelovitch completed. Several others, including United States Charge d'Affaires Low W. Henderson, have postponed dental treatments with the hope that Yudelovitch will be released soon.

Yudelovitch is about 50 years old, a Soviet citizen, and has a wife and daughter in Berlin.

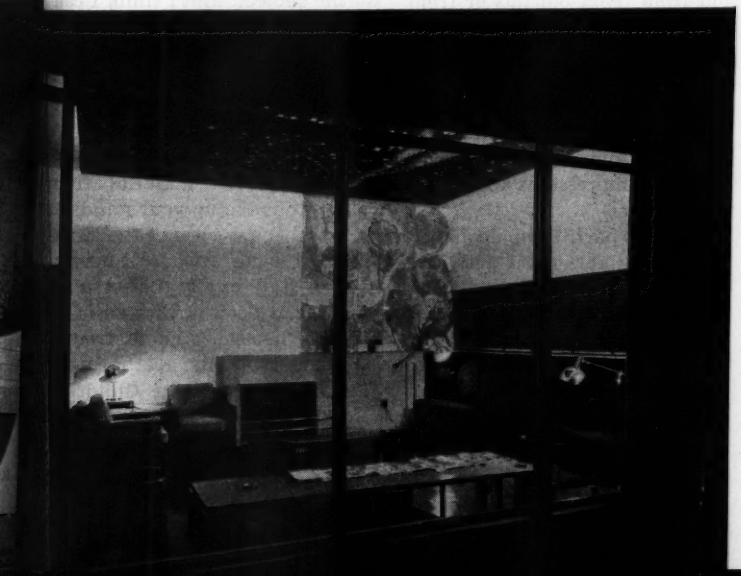
A Modern Setting *for Dentistry*



The office of Leo M. Shanley, 7800 Maryland Avenue, Saint Louis, Missouri, is planned exclusively for the practice of orthodontia. The rear view of Doctor Shanley's building (below) shows the deck opening from the reception room. On the ground floor is a recreation room.



The entrance and the receptionist's desk are shown above. This well arranged reception room (below) was planned with the interests of the young person in mind. On the ceiling, covering the heating and air conditioning outlets, is a painting of a stellar constellation. Colorful maps on the wall are helpful to the young person in his school work.



The Child, the Dentist, *and the Social Security Act*

by FRANK HOWARD RICHARDSON, M.D.

SOME TIME AGO, I received a letter from a prominent dentist which interested me quite as much as it exposed my ignorance of a matter about which I knew I should have been well informed. This is what he wrote:

"Can you tell me something about the child health phases of the Social Security Act; and especially, what is being done under its provisions in the way of dentistry, either preventive, educational, or reparative? I have the feeling that, so far as dentistry is concerned, the people whose teeth are irreparably damaged should not receive much attention from relief officials or from the Social Security people. And when I say people whose teeth are irreparably damaged I mean, of course, most adults. (Please remember, I am quoting a dental authority, and not recording my own hazy impressions about dental matters!)

"For my part, I should like to see all available relief activities, and all that can be made available, directed primarily to children. If we must have health insurance—and, though I am expressing no opinions on that subject, I must confess that it begins to look as though we should come to it soon—I wish it could be in a form directed primarily to children."

I was compelled to agree with him; but that wasn't what he wanted particularly. He was anxious to know if those who are administering the Act agreed with him. That was important to him and is important to the rest of us, whose money is being spent and who may at some time or other be called upon to contribute our support to the idea or our skill toward carrying it out.

Accordingly, I wrote to someone I considered to be in a position to give authoritative information on the subject. And I think I can say positively that the whole feeling of those who are administering the dental phases of the Social Security Act is definitely in accord with my correspondent's views in the matter. But before giving you the material from which to make up your minds as to whether my view of the situation is the correct one, it may be well to state briefly the set-up of the Social Security Act as it refers to health. I quote from a statement by Miss Katharine F. Lenroot, Chief of the Children's Bureau of the Department of Labor, Washington, D. C.:

"The Children's Bureau is entrusted with the administration of three services for children under the Social Security Act. These provide Federal Aid to the States for promoting (a) maternal and child health (b) corrective care and related services for crippled children, and (c) child welfare. Their purpose is to extend and improve services for mothers and children, especially in rural areas, in areas suffering from severe economic distress, and among groups in special need. The Social Security Board is responsible for the administration of that section of the Act which seeks to provide, in cooperation with the States, financial assistance to needy dependent children in their own homes. Federal aid for general health services is authorized in still another title, administered by the United States Public Health Service.

"Within the Children's Bureau each part of the program has been placed under the immediate direction of a division set up for this purpose. The Maternal and Child Health Division and the Crippled Children's Division are directed by physicians; the director of the Child Welfare Division is a social worker."

Of these three divisions, the first; that is, the Maternal and Child Health Division, is naturally the one under which the dental service is included. The Director of this Division, Albert McCowan, M. D. writes as follows in describing the work of this division, in the Bureau's Monthly News Summary:

"A conference of State directors of maternal and child health divisions was held in Washington under the Auspices of the Children's Bureau on June 6 and 7, 1936. It was reported at the conference, which brought together representatives from 45 States, Alaska, Hawaii, and the District of Columbia, that every state and territory had submitted a plan for maternal and child health services under the Social Security Act, and that in the majority of States, directors and staff members had already been appointed.

"The Act authorizes an annual appropriation of $3,800,000, to be used for making payments to states which have submitted, and had approved by the Chief of the Children's Bureau, State plans for such services. An initial sum of $20,000 is available for each State and Territory. An additional allotment is available based on the ratio of live births in the State to the total number of live births in the United States. These funds must be matched equally by State or local funds. A further allotment may be made without matching of funds, according to the need of the State for financial assistance in carrying out its State plan, the number of live births in the State being taken into account.

"The Act requires that State plans be administered or supervised by the State agency. Federal grants are to be considered

not as substitutes for State and local funds but as grants for supplementing the maternal and child health activities of the State and local communities.

"Of the 51 plans submitted, 49 had been approved and were in operation by June 30, 1936. One was to go into operation early in the new fiscal year, and the remaining one was delayed by legal complications . . . The State plans for maternal and child health services include in many instances provisions for dentists, dental hygienists, and health educators."

So much for a boiled-down statement of just what the Social Security Act is, and what it calls for, so far as the health of the children is concerned—much less than this would be inadequate to an understanding of just what the dental situation is. And now for a brief account of what is being done in some of the States.

The state plans have been analyzed by the staff of the Children's Bureau and information concerning the provision made for dental activities has been compiled. In sending me this information, my informant added this illuminating comment:

"Every state in the Union, as well as Alaska, Hawaii, and the District of Columbia, has submitted plans for maternal and child health services. All plans have been approved for the fiscal year 1937. This is the first time in history that such satisfactory state cooperation has been complete. You will remember that under the Sheppard-Towner Maternity and Infancy Act, Massachusetts, Connecticut, and Illinois did not participate."

And now, here is the data that has been specially gathered for the use of the readers of ORAL HYGIENE from Progress Reports of the Maternal and Child Health Division to June 30, 1936, and from 1937 plans. The ten states listed here have been selected for illustrative purposes, because their dental programs are taking definite form and are typical of the kind of activity that will probably develop under the Social Security Act. It must be kept in mind that there are other states, besides these ten, where comprehensive dental programs are planned and underway.

CONNECTICUT—A state-wide mouth hygiene program has been planned, also teaching institutes have been outlined for county dental societies.

INDIANA—A demonstration is being conducted in cooperation with the state and county dental societies in Owen and Greene counties, consisting of a mobile unit "equipped strictly for children's dentistry." Extraction, prophylactic, and amalgam and cement restoration service will be given to indigent children. It is the purpose of this plan to furnish dental service to those children who otherwise would be forced to forego the benefits of dental attention, and by so doing improve the general health index of the children of the community. This, through the education

of the parents and the demonstration of actual service performed, cannot help but react favorably in such a manner as to benefit the general public.

KANSAS—A Division of Dental Hygiene was created May 15, 1936. Since then a unified program has been worked out and executed by the cooperative activities of dentists, teachers, and public health nurses in the examinations, teaching of mouth hygiene, and follow-up work. This program is meeting with general approval and has been adopted in 23 counties. The dentists will receive postgraduate public health training.

MINNESOTA—One of the demonstrations will consist of research study for dentists in cooperation with the University Medical School and Mayo Foundation as to the relation of fluorine in the water to dental caries and dental deformities. Dental health education is also included in the state program.

MISSISSIPPI—The state staff assists in the development of local dental programs through the cooperation of local dental societies, Parent-Teacher Associations, and other civic groups. Dental hygiene service is included in the health program of most of the organized counties, and of the unorganized as well.

NORTH CAROLINA—Through the Division of Oral Hygiene there will be a state-wide program of graded didactic work in the schools, demonstration of mouth inspection, and corrections for

Katharine F. Lenroot, Chief, Children's Bureau, U. S. Department of Labor.

indigent children. There are twenty-one dentists on the staff, twenty of whom will receive postgraduate public health training.

OREGON—An oral health program is being planned by the State Dental Committee to be directed by the State dental clinician in cooperation with the Director of Maternal and Child Health. The program will consist of organization, demonstration, and education. The dentists of local communities will be organized to assist in making a statistical study of the oral health needs of the community. A demonstration of methods of preventing oral and dental disease will be made available to the mothers and children of the

state. An effort is being made to provide those of lower income levels with necessary dental care. A continuous educational program will be established in which nutrition features will be stressed.

PENNSYLVANIA—The staff consists of one dentist and eight dental hygienists. It is planned to institute graded courses in oral hygiene instruction in all the rural schools of the state. Preschool dental conferences including the displaying of motion pictures will be held.

RHODE ISLAND—The staff consists of one part-time dentist and two dental hygienists. Postgraduate courses of lectures will be given for dentists. One dental hygienist will work in the schools in cooperation with the Parent-Teacher Association, the other will do home visiting in four sparsely settled areas and in an industrial center for the purpose of demonstrating dental hygiene and making a survey of dental needs in these areas.

TEXAS—The staff consists of one dentist and two dental health instructors. In the Division of Dental Hygiene it is planned to use the puppet show approved by the Teeth Council as a dental hygiene project. This will be done in connection with the State University dramatic department, local dental societies, and the superintendent of schools.

In all, at the present time, there are 27 states, employing 53 dentists, 49 of them full-time and 4 part-time.

This, then, is a brief and incomplete survey of what is being done, and what is in prospect for the children of the nation under terms of the Social Security Act.

For the benefit of any readers who may wish to secure more information upon the general subject of the Social Security Act and what it is designed to do, the following brief bibliography is given:

Publications of the Children's Bureau (Available upon request):

"Children in the Social Security Program" by Katharine F. Lenroot.

"Grants to States for Maternal and Child Welfare Under the Social Security Act"

Publications of the Social Security Board (Available upon request):

"Aid to Dependent Children Under the Social Security Act"

"A Brief Explanation of the Social Security Act"

"Federal Grants to State Plans for Aid to Dependent Children"

Other Government Publications (Available from Government Printing Office, Washington, D. C.):

"The Social Security Act" . . . (Establishing a Social Security Board)

"Message of the President Recommending Legislation on Economic Security"

"Report to the President of the Committee on Economic Security"

Children's Clinic
Black Mountain, North Carolina

ATTENTION, DENTISTS

THE FEDERAL BUREAU of Investigation, United States Department of Justice, requests the cooperation of the dental profession in the apprehension of the unknown kidnaper of Charles Fletcher Mattson, 10, son of Doctor and Mrs. W. W. Mattson of Tacoma, Washington.

Below are reproduced two views of an artist's drawing made from oral descriptions of the kidnaper as furnished by the children who

were at the home of Doctor Mattson at the time of the abduction on December 27, 1936.

The person who kidnaped Charles Fletcher Mattson is described as follows: Age, about 30 years; height, 5′7″ or 8″; weight, 145 to 165 pounds; complexion, swarthy; spoke brokenly with slightly foreign accent; appeared to be of Southern European extraction; peculiarities: did not stand erect, dimple in chin, high cheek bones, nose appeared to be broken a little below center, had hairy hands.

It will be greatly appreciated if you will communicate any information you might have, or later obtain, to the nearest Division of the Federal Bureau of Investigation, United States Department of Justice, or to the National Headquarters of the Federal Bureau of Investigation at Washington, D. C., the telephone number of which is National 7117.

A reward of $10,000 has been authorized by Homer S. Cummings, Attorney General of the United States, for information furnished to any representative of the Federal Bureau of Investigation leading to the identification and apprehension of the said kidnaper.

Editorial Comment

GIVE ME THE LIBERTY TO KNOW, TO UTTER, AND TO ARGUE FREELY ACCORDING TO MY CONSCIENCE ABOVE ALL LIBERTIES. *John Milton*

A DENTAL LAW WITH "TEETH"

ON MONDAY, MARCH fifteenth, the Governor of Missouri signed a new dental bill and thus it became a law. This bill passed the Senate unanimously and received but one dissenting vote in the House. The Missouri law is probably the most stringent on the statute books of any state. It should be the model for every American state.

Under the provisions of the law, in which there is no "Missouri Compromise," the State Board of Dental Examiners is given not alone full power to license dentists but also the power to suspend or revoke licenses. There is no department of registration or education composed of political appointees who can thwart or obstruct the action of the State Board of Dental Examiners. The only appeal from rulings of the Board is through the circuit and appellate courts. The lower courts have no power or jurisdiction to review, revise, correct, or amend any judgment or order of the Board, or to suspend or delay the execution of an order of the Board, or to enjoin, restrain, or interfere with the Board. Furthermore, the Board of Dental Examiners is given the quasi-judicial function to administer oaths, take depositions, and has the power of subpoena. Appeals from the rulings of the Board must be made within thirty days to the Circuit Court in the district in which the original hearings were held. The judgment of the Board is in force until revised or modified by a circuit or appellate court.

There are three categories of offenses that may subject a dentist to action for revocation or suspension of license: First, conviction of a felony or misdemeanor involving moral turpitude; second, for renting or loaning to any person a license or diploma; third, for unprofessional or dishonorable conduct, or for gross ignorance or ineffi-

ciency in the practice of dentistry. *Unprofessional conduct includes every and all methods and forms of advertising by dentists.* It is in this section that the "teeth" of the new law are particularly sharp and strong.

The penalties for violation of the law are as potent as the other provisions. A violation is considered to be a misdemeanor punishable by either fine or imprisonment or by both. And each act of practice is considered to be a separate offense and so punishable. The law further provides for an annual renewal of licenses. All dental licenses expire on the thirtieth day of November of each year. Another provision gives authority to the Dental Board to ascertain and determine what shall constitute a dental college or institution in good standing or repute. The law makes plain the complete course of study that a dental college must offer so that its graduates may be eligible for a license in Missouri.

An unusual and far-reaching provision gives the Dental Board the authority to inspect any dental office so as to determine the sanitary condition of the office and instruments. This section of the law confers upon dentists, rather than upon lay inspectors, the power to regulate the conditions under which dentistry may be practiced with safety to the public. It is time that such a provision was made. If lodging-houses and restaurants must conform to certain hygienic laws, dental offices in which operations on human tissue are performed should be supervised. We would prefer to think that dentists with their knowledge of bacteriology and hygiene would not need official inspections. But there are still some dental offices where the steam from sterilizers in operation would never cloud a pair of spectacles. For the unsuspecting patients in such offices the sanitary provisions of the dental law are a safeguard.

Every ethical dentist should hope that the Missouri law will be the pattern from which similar legislation will be cut in all other states. Once again Missouri shows us the power of well organized and well directed dental groups. Without virile dental societies this kind of legislation could never be passed.

Edward J. Ryan

The Cleveland

SCHOOL PLAN *in Action*

THE PLAN DEVELOPED by the Dental Advisory Group to care for the teeth of Cleveland school children has been functioning effectively since January 15, 1937, under the direction of Doctor R. E. Creig, President of the Cleveland Dental Society, and Mrs. John C. Wulff, President of the Child Health Association. This program is the outgrowth of a decision made in the summer of 1936 to have the Society and various health and civic organizations cooperate to furnish dental service for school children. It is based on the idea that the oral health of children is the joint responsibility of the dental profession and the community as a whole.

Under this plan the Mouth Hygiene Staff, composed of dentists and teachers of mouth hygiene has been making examinations, obtaining consultations with parents and social ratings, and referring cases to private offices and hospitals. Dentists, 750 members of the Cleveland Dental Society, have agreed to give part pay dental service to children at the rate of $1.00 a tooth.

In January, 26,553 pupils were examined and 97,204 carious teeth were found. Of these, 76,283 carious teeth needed restorations, and 20,921 had to be extracted. Private dentists, at full rates, placed restorations in 3,896 teeth, and dentists on the part pay schedule placed 242. In 563 teeth, restorations were placed without charge. Emergency relief was given in the schools in 156 cases.

With reference to extractions, 1,667 teeth were extracted by private dentists at regular rates; 507, on the part pay basis, by participating dentists and hospitals; and 1,131 teeth were extracted free.

On March first, the free extraction program for indigent children at the various hospitals, developed by the Hospital and Coordinating Committees, went into effect. Now the committees of the Cleveland Dental Society, Child Health Association, and civic groups are actively working for a free restoration service for indigent children. Favorable comment in the Cleveland *Press* has aided in promoting this project, according to Doctor J. V. Gentilly, Secretary of the Coordinating Committee of the Cleveland Dental Society.

DEAR ORAL HYGIENE:

"I do not agree with anything you say, but I will fight to the death for your right to say it."—VOLTAIRE

Doctor Pollock on Orthodontia

After Gorgas eradicated Yellow Fever in Panama by locating the mosquito host, after the Rockefeller Foundation spent millions to conquer "hook worm" disease, after the best talent in the medical profession had spent many years in the effort, it would be unjust for an intolerant physician to "bust into print" with the statement that "it is easy to cure Yellow Fever, hookworm disease, Bubonic Plague, and so on."

While not as spectacular or as well advertised as the story of the "microbe hunters," notwithstanding, during the short space of the last thirty-five years, the richest and most complete literature of any department of dentistry has been created by orthodontists pertaining to their subject. During this limited period, a new and highly meritorious department of dentistry has been created, by only a handful of workers, inspired by the Angles, Deweys, Ketchams, and Pullens. It is no less unjust for the author[1] writing in the February, 1937, issue of ORAL HYGIENE to attempt to tweak the nose of the orthodontic specialty, than it is to ridicule or belittle the work done by industrious workers in other fields of medicine and dentistry.

The author's charge that orthodontists are aloof and contemptuous will no doubt be waived on account of the general knowledge of human behavior—behavior is about the same the world over—causing gyrations like the cat that gets its tail caught in the wringer. It spits and spits until something is done about it. But the charge that "orthodontia is easy" (obviously meaning that orthodontia has been built up by a kind of scientific hocus-pocus), this is difficult to reconcile with facts. There may be some justification for the charge that orthodontists in their great enthusiasm for the advance of their subject have on occasion listened to some scientific "credit inflation" by essayists here and there, in the past; however, certainly this has occurred no more frequently than it has in other departments of medicine and dentistry—moreover, any scientific theory not supported by facts soon finds its way to the ash can.

In order to be entirely charitable, however, it must be understood that the article mentioned is honest in that it is labelled "My Opinion of Orthodontia." This is plainly the opinion of one man with limited experience and restricted background in the subject, and can be of no more importance than one man's opinion of how many men there should be on the bench of the Supreme Court of the United States; it is important only in that wide publicity becomes propaganda and does not necessarily

[1] ROSS, N. L.: My Opinion of Orthodontia, ORAL HYGIENE 27:179 (February) 1937.

need to be more than a fringe of the truth.

The threadbare wheeze, "a little knowledge is a dangerous thing," is here exemplified again, and the casual reader sits with tongue in check and with the feeling of amazement upon reading this article, until he comes to the last paragraph—then the cat slips out of the wringer and clear out of the bag. The author says: "Since I enjoy my work and find orthodontia easy, no worthy patient is refused because of inability to pay my standard fee"—'standard fee'—that's the *"Alleoop"* as the cat emerges from the well-known bag.

Orthodontists are proud of the specialty that has been created as a department of dentistry.—H. C. POLLOCK, D.D.S., *Editor, International Journal of Orthodontia and Oral Surgery.*

Comments on Orthodontia

The article by Doctor Norman L. Ross[1] in the February issue of ORAL HYGIENE was read with a great deal of pleasure. He, as a general practitioner, dealt directly and to the point with the subject of orthodontia and should be congratulated. His general experiences and observations are little different than other general practitioners who correct malocclusion cases.

This subject of general dentistry as related to orthodontia should be important to all general practitioners. The specialists in the past have written many articles on why the general practitioner should not treat these cases. From them, it might appear a dentist must inherit this "plus ability" to successfully treat malocclusion. From the reprints of orthodontia meetings they seem to be greatly absorbed in devising means of closing their doors tighter against the general practitioner. A few specialists have been so unkind as to recite case histories to show that a general practitioner should not attempt these cases. They point to the general practitioners' failures in the orthodontic field, as proof that this work should be limited to the specialist. The queer thing is why more general practitioners have not written similar articles in retaliation. I have seen a few cases that were utter failures and the orthodontic efforts toward correction were carried on by men who limited their practice.

The asinine thing that looms up is the fact that a few self-appointed guardian angels, who limit their practice, have the nerve to not only suggest, but advocate, a special license for men who treat orthodontic cases. They must have forgotten they received their orthodontic training in short courses, only a few years ago. The courses then were short, only a week or two in length, and the basic scientific training of the dentist at that time was less than the high school graduate today. They became specialists. A few questions from a general practitioner might be in order. What school of thought in orthodontia would they require for this examination? If the specialty is so far removed from the general practitioner, how do they account for so much doubt and confusion, among their own ranks? Even the classification of malocclusion is sadly lacking and this fact is agreed upon by the authors of texts on the subject. Orthodontic treatment certainly is not an exact science with so few specialists using the same methods.

A few suggestions might be in order for the specialist who spurns the general practitioners' treatment of cases. If the specialist's knowledge is so far beyond the realm of the general dentist, he might write a few needed articles on some of the basic things of his specialty. For example, unfold a few of the mystifying secrets, in regard to the temporomandibular articulation in the so-called class 2 and class 3 cases, that would meet with the approval of a quorum in his own specialty. A classic on the behavior of the alveolar process would be timely.

The behavior of the alveolar process is an important subject to us general practitioners. But to the man that limits his practice to orthodontia it must be a more vital subject.

In the meantime, the man that limits his practice might welcome the younger student when he wishes to receive instruction. It is the general practitioners who really make his specialty possible. If he is really sincere in saying that the general practitioner should not practice orthodontia, why does he spend time with detailed techniques at state dental meetings?

I realize that criticism is often misconstrued. For that reason, a vote of thanks is in order for the many helpful hours of instruction some specialists so freely give to other dentists.

We must recognize that orthodontia cases are being successfully treated by general practitioners. They are close students of physiology, who have thorough case histories, definite muscle training exercises, simple and understandable model surveys, and simple and accurately fitting appliances. They are Doctors of Dental Surgery. It is as right and just for them to practice orthodontia as it is for them to remove teeth or make a foil filling. They nudge nature here and there, and aid in unfolding the teeth and jaws of boys and girls so they will be beautiful men and women. This gratification is not equaled even by the finest foil restorations, as orthodontia is the only process in dentistry by which we can improve the condition.—Ross A. PENNY, D.D.S., 4614 *North Thirtieth, Omaha, Nebraska.*

Is Orthodontia Easy?

After reading the short article on orthodontia by Doctor Norman L. Ross[1] in the February ORAL HYGIENE, I was impelled to accept the editor's invitation to comment. It has always been my policy to accept truths, even though they may come from those with whom I seldom agree. However, half truths, apparent errors, incomplete statements, and unjustified conclusions, certainly deserve to be promptly and emphatically refuted.

Orthodontia as well as any other branch of dentistry may be easy for some and extremely difficult to others. This is true of bridgework, platework, root-canal work, exodontia, pyorrhea alveolaris, and so on. Why Doctor Ross should single out orthodontia, which undoubtedly requires far more study and skill (theoretical and practical) than perhaps any of the others, is to say the least extremely puzzling.

If Doctor Ross had said that he had found great difficulty in obtaining satisfactory education and training in the specialty of orthodontia, I would be inclined to agree with him. It appears that he has found such difficulty. For as he himself intimates, it was only after considerable inquiry that he was able to secure a competent orthodontist under whom he could study and finally master the subject to his entire satisfaction. With this method of study I am in complete accord. I believe that working and studying as an associate or apprentice to a competent orthodontist is one of the best methods of mastering the subject. This, by the way, is also true of all of the other branches of dentistry. The chief drawback to this method of study is the difficulty of securing a competent orthodontist willing to accept associates or apprentices, and also the usually great cost involved.

Articles such as this one by Doctor Ross, because of the incomplete statement of the facts, are certain to be misleading, especially to the average dentist unfamiliar with the subject. Conclusions hastily arrived at by the average dentist that "Orthodontia is Easy," may result in considerable damage both to the unsuspecting patient and the inexperienced dentist.

My recommendation to those inter-

ested in practicing orthodontia is to study and practice it thoroughly under the supervision of competent and experienced teachers. Much of the so-called mystery and secrecy surrounding orthodontia, often spoken of, is the result of the inability to obtain proper orthodontic training of the type just mentioned. Theoretical, mechanical, and practical study and training requires considerably more time than the average dentist is either willing or able to give to the proper mastery of orthodontia. For example, it may require three or more years to successfully complete the treatment of several of the various types of existing malocclusions. Is it fair to the innocent patient to have a dentist treat him who has no such experience? After a careful and sober consideration of the subject, the inevitable conclusion must be that orthodontia is not quite as easy as Doctor Ross would have the average dentist believe.—SAMUEL HERDER, D.D.S., 230 *West Seventy-Ninth Street, New York.*

Congratulates Doctor Moline

May I congratulate you most sincerely on the publication of DENTISTRY—WHERE IS YOUR VOICE? by Doctor Moline[2] in the February issue of ORAL HYGIENE.

It should be published in the American Dental *Journal* and then referred to the various state and national association Houses of Delegates, for Action.—M. L. JORDAHL, D.D.S., *Lake Park, Minnesota.*

Do Children Like to Go To the Dentist?

One day when I was at the dentist's and he was working on my teeth I asked him why all children hated to go to the dentist. He looked at me in a funny way and said, "Why, I don't believe that's true." We discussed the question but I could not convince him that I was right. Later I got the idea of having a questionnaire on the subject. I asked my teacher if she would cooperate with me and she said she would be glad to. Then I asked my dentist to suggest the questions, but he said that he would rather I did it because it should be from a child's point of view.

I am in the eighth grade at school and the average age in my room is 13. There were twenty-seven children present on the day the questions were passed out and each one filled his out without any help. They were not required to sign their name so they could say whatever they pleased.

The five questions were:

1. Do you like to go to the dentist? Why?
2. What is it you like about it and what don't you like about it?
3. Can the dentist do anything to make you like it more?
4. How often do you go to the dentist?
5. Do you think good-looking teeth are of any value to you?

Out of the twenty-seven answers for the first question, I found there were two children in the room who had never been to the dentist. One of these said that he had heard that it was awful. Ten answered yes, they did like to go to the dentist, but three of those complained of the pain. Five said they liked to have good teeth. One liked it because he was fond of the dentist and one because he liked the chair. Three answered, not very well. Twelve said, no, they did not like to go to the dentist. Eight of these hated the pain of the drill. One disliked the dentist. One didn't like the distance he had to go. One would not go unless forced to. Two didn't like to give the time.

In answer to the second question, "What is it you like about it and what don't you like about it?" fourteen children said that it was the drill that bothered them most; two

[2]Moline, W. A.: Dentistry—Where is Your Voice? ORAL HYGIENE 27:186 (February) 1937.

said it helped if the dentist was friendly and not crabby. Waiting a long time and then having the dentist talk about his golf game was very boring. One liked the magazines but didn't like the view out the window from the dental chair. One disliked the smell of medicine but wanted to know more about the machine and instruments. One missed the toys and attention she got when younger but appreciated the friendly nurse. Samples of tooth paste and gum to take home helped them to enjoy it more.

Answers to the third question, "Can the dentist do anything to make you like it more?" were almost unanimous in asking the dentist to use something to deaden the pain in drilling. If he can't do that, to be more friendly and humorous while the drilling is going on or to tell an interesting story to make you think of something else.

"How often do you go to the dentist?" was the fourth question. One boy had not been there in seven years. The other answers varied from three times a year to once every two years with the greater number going once a year or oftener if they have a toothache.

Everyone in the class agreed that good-looking teeth were an advantage for looks and popularity and an asset later in the business world, in answer to the fifth question, "Do you think good-looking teeth are of any advantage to you?"

I am going to let you decide whether the dentist or I was right in saying children dislike going to the dentist.—NAN DAVLIN, *Age* 12

MY ERROR

In the story of the success of Doctor William A. Bacher as a radio impresario entitled FROM MOUTH TO MICROPHONE, March ORAL HYGIENE, I carefully stated that he pronounced his name as if it were spelled "Baker." My mistake! He pronounces it as if it were spelled "Bay-Cher"; the "a" is hard and the "c" is soft. This explanation is made for the benefit of those old friends who feared he had gone "Hollywood" and changed the pronunciation of his name. He hasn't; he's the same old Bacher and he says it in the same old way.—Rea Proctor McGee.

Ask ORAL HYGIENE

Please communicate directly with the Department Editors, V. CLYDE SMEDLEY, D.D.S., and GEORGE R. WARNER, M.D., D.D.S., 1206 Republic Building, Denver, Colorado, enclosing postage for a personal reply. Material of general interest will be published each month.

Pain in Temporal Region

Q.—Your advice on a recent inquiry of mine proved valuable, and I have no feeling that I am imposing on your good nature now in asking for more aid.

My patient is a middle-aged woman, in comparatively good health. With only three teeth missing (upper right third molar, and upper left second and third molars), she presented herself about a month ago, complaining of pain in the left temporal region and below the orbit. The second molar had been removed about two years ago, and the symptoms were first experienced during the past summer.

Roentgenograms revealed the presence of a retained root, with no apparent area, and the presence of a pulp stone in the first molar. Because of the periodontoclasia around the roots of the first molar, and its consequent mobility, I removed that tooth. The referred pains vanished, but after a month she complained of localized pains in the molar area. The extraction was effected with no difficulty.

At present I am attempting to treat the distal root surface of the second premolar with trichloracetic acid. I doubt very much whether the small cavity present is responsible for the condition.

Would you advise the immediate removal of the root fragment, and attribute the present complaint to its retention?—R. B., Pennsylvania.

A.—The history of the case presented in your letter would indicate that this patient is sensitized to bacterial proteins.

The roentgenogram enclosed with your letter shows a serious destruction of bone in the bifurcation of the first molar. In these cases we virtually always find a granuloma and are able to culture out pure strains of streptococci. The second bicuspid has the funnel type of periodontoclasia which, in my opinion, would indicate a pus pocket around this root. It should, therefore, be cleared up, or the tooth extracted if it cannot be cleared up. And as for the root which lies distal to the first molar, which you have extracted, I certainly would remove that also. Moreover, this woman should have a complete roentgenographic examination and all foci of infection should be cleared up.—GEORGE R. WARNER.

Cold Induces Pain

Q.—I have a patient, a young woman, 25, who complains of a peculiar condition. She says that when she goes out into the cold air and then returns home that all her teeth ache, sometimes for two or three hours at a time. Aspirin has given a little relief once or twice but not al-

ways and then never completely. Roentgenograms have been taken of all the teeth and nothing pathologic can be found. Restorations have been placed in all cavities.

Despite all I can do, this pain still persists and I should like to have some advice on this matter.—C. A. B., Kentucky.

A.—The condition described in your letter is unusual but not unknown. I have experienced the same thing periodically for a good many years, but, confident that my oral cavity was in good condition, have disregarded the discomfort.

The explanation of the condition lies in the fact that the auricular branch of the vagus is exposed to the weather in the posterior part of the external auditory meatus and back of the pinna of the ear.

This can cause pain in the fifth nerve because of connection of the vagus with the trigeminus. "The sensory root of the trigeminus, through the gelatinous substance of Rolando, has a synaptic connection with the dorsal vagus nucleus."[1]

There is probably no danger of damage to the trigeminus and it is possible that the pain will be less obtrusive in time.—GEORGE R. WARNER.

Mercurial Stomatitis

Q.—Please furnish a detailed treatment for mercurial stomatitis. I do not have satisfactory results in treating it.—P. L. W., Georgia.

A.—The local treatment of mercurial stomatitis should be much the same as the treatment for Vincent's infection. The teeth must be carefully but thoroughly relieved of all hard deposits and foreign material of whatever nature. Overhanging restorations, crowns or bridges must be polished to a smooth, flush contact with tooth substance. A 5 per cent chromic acid solution may be used in the gingival crevice and the patient should flush the mouth thoroughly several times each day with a hot sodium perborate solution, a teaspoonful to a glass of water. Office treatment should be given every day or on alternate days until the tissues have assumed a normal tone.

Mercurial treatment should be discontinued and, if the stomatitis is due to exposure to the metal, the exposure must cease. According to Prinz & Greenbaum,[2] the elimination of mercury from the system is hastened by intravenous injections of sodium thiosulphate.—GEORGE R. WARNER.

Tuberosity Injections

Q.—Please tell me how to avoid swelling and discoloration when making the tuberosity injection. This happens occasionally despite my efforts. I know it results from a puncture of a small blood vessel but I know of no remedy, although I try ice packs.—P. L. W., Georgia.

A.—The best of operators will occasionally have a hematoma following a procaine injection and more particularly with the tuberosity injection. To avoid it one should start the needle opposite the distobuccal root of the second molar and push it upward, inward, and backward—slowly. If resistance is felt, the needle

[1]Symposium on Asthma, Med. J. & Rec. (November 6, 20) 1929.

[2]Diseases of the Mouth and Their Treatment, Prinz & Greenbaum, Philadelphia, Pennsylvania, Lea & Febiger, page 195. 1935.

should be slightly withdrawn and direction changed enough to avoid the resistance previously noticed.—GEORGE R. WARNER.

Removing an Epulis

Q.—I have a patient, a girl, 12, for whom I removed an epulis last June. It was growing between a lower right lateral and central, and was attached to the mesial aspect of the lower right lateral. I scraped the peridontal fibers close to the bone but did not curette. Then I cauterized with trichloracetic acid. In three months time the epulis had grown again. I have not removed it the second time. It is now beginning to force its way through to the lingual as well as the labial surface.

I have seen this patient regularly about once a year since she was five years old, but only in the last year have I noticed marked gingivitis, which I could not control with the usual gum treatments at the chair and different mouth washes at home including mainly sodium perborate. On almost all her anterior teeth upper and lower, there is a hypertrophic swelling protruding labially at the proximal. This is the typical spongy, deep red type that bleeds profusely at the slightest touch. There is only a slight malocclusion.

Four months ago she had her tonsils removed and developed a severe hemorrhage, about two days after the operation. At that time I asked her physician to examine her carefully to see if he could find anything in her general condition which might be causing this gum condition. He could report nothing except that her tonsils were badly infected. I have checked this girl's diet. She eats well and has a good general diet and has always been in the best of health.

Can you suggest any further treatment that might be of help in this case?—H. D. L., Minnesota.

A.—The growth which you describe merits careful consideration. In all probability it is benign but certainly its character ought to be established by a microscopic study by a clinical pathologist. The further treatment would be indicated by the result of a biopsy.

The general gingival hypertrophy would seem to be of the inflammatory type, although this type is more likely to occur in poorly cared for mouths.

There is a type of hypertrophy which occurs most often in young women in which there is not much tendency to bleeding and is not necessarily found in unclean mouths. These cases sometimes clear up of themselves as the patients become older or, in the case of a young married woman, when she bears a child.

The inflammatory type should have especially good home care as well as frequent prophylactic treatments. The hypertrophied areas may be treated with trichloracetic acid or copper sulphate and, if necessary, may be excised.—GEORGE R. WARNER.

Dryness of Mouth

Q.—I have a patient, a woman, 50, for whom I recently extracted all remaining teeth most of which were badly affected with pyorrhea.

Because of waiting for absorption to take place, I have not yet made her dentures. Meanwhile, she complains of severe dryness of the mouth and I am at a loss to explain the cause of it. It seems to be most distressing as it involves her lips as well.

I advised her to see her physician but her husband is on WPA and they have no regular physician, so I told her that I would get some information if possible and advise her the next time she came in.

I also told her that when she gets

her dentures they will stimulate the saliva glands perhaps enough to overcome the dryness of which she now complains.—M. H. A., Nebraska.

A.—You are probably right in telling your patient that the flow of saliva will be increased when she has her dentures. This increase of flow of saliva will be, at least in part, due to opening the mouth to the proper vertical dimension, and removing pressure from the nerves and blood vessels around the temporomandibular joint.

We find it in every way better to make immediate dentures after removal of all the teeth. This prevents the joint from getting out of place, and prevents the muscles from losing their tone, and also promotes healing of the sockets. No matter how long one waits before making dentures after extraction, it is usually necessary to remake the dentures or reline them after a while. So from that point of view there is no advantage in waiting for the gums to heal, and there are so many advantages in immediate dentures that they overcome any possible disadvantages.—GEORGE R. WARNER.

Investing Dentures

Q.—I should appreciate any information or suggestion referring me to some textbook or dental magazine that will describe the technique of investing dentures to be rebased.

I have been boiling my flasks to soften the rubber, but it seems to me that the rubber does not get soft enough so that I may have distorted the plaster. My last two dentures I cut down on the periphery and built them up with compound. The patient wore the denture for several days with great satisfaction. I took a thin plaster wash, made a stone model, invested and vulcanized, and when the denture was inserted in the mouth there was lack of suction. —S. L. M., New Jersey.

A.—I think I can tell you just one step to add to your technique that will eliminate your difficulty: After the cast is poured, remove the teeth by heating each tooth separately and pushing it off with a pointed instrument. Seal the teeth accurately back into their sockets with wax, flow as much wax over the entire denture as will be polished off in finishing and proceed with flasking, boiling out, vulcanizing, and finishing just as with a new case.—V. C. SMEDLEY.

Exfoliated Cells

Q.—One of my patients, about 38, has a full upper denture in thermoplastic that has been in the mouth fifteen months, and her full lower denture is made in vulcanite.

The efficiency of her denture is A 1. The teeth had been removed seven months previous to making the dentures. About four months after I had inserted the dentures the patient returned with a white, creamy looking deposit over the entire palatal region. This resembled "dead" skin and was easily removed by scraping. Along and for an inch anterior to the post-dam region the tissue was irritated and sore to pressure. Six months later the white substance on the palate had entirely disappeared but irritation still remained and was worse when the dentures were removed than when they were in place. Dentures have been "spot ground" and the bite is perfect. We have used many thermoplastic cases here with no trouble and would like enlightenment if it is possible for you to give it. The patient is in good health and is fastidious in her care of her dentures.—S. M. R., Oklahoma.

A.—I have often seen mouths with an accumulation of exfoliated epithelial cells giving the appearance of a "scum" of dead tissue that can be scraped off with a mirror or other blunt instrument. If this dead tissue is allowed to continue to accumulate, it can easily become a source of irritation.

I believe that this condition will clear up and not recur, if the denture is left out for several days and the mouth is irrigated generously with warm normal salt solution and if, thereafter, as a permanent habit, the denture is left out at night. I have not seen this accumulation of exfoliated epithelium, or irritation therefrom, in mouths in which the dentures are not worn continuously.—V. C. SMEDLEY.

Swaged Aluminum Dentures

Q.—I am writing for information in regard to swaged aluminum dentures. What has been your experience, have they been a success when worn in the mouth? I have swaged some practical cases in past years but never knew how successful they were. Sheet aluminum can be swaged over an artificial stone model to make a snug fit; the posterior edge can be reinforced with solder to make it more rigid, can be nicely polished, is a good conductor of heat and cold, material is inexpensive, teeth can be attached by stippling the ridge or soldering lugs on the ridge.

I should appreciate a reply as to your experience and knowledge in regard to the material as a denture base.—F. B., Iowa.

A.—I made a number of swaged aluminum dentures some years ago, but the results were not satisfactory. They were not stiff enough to resist bending in some mouths; in others they seemed to dissolve or disintegrate gradually, and the vulcanite tended to separate from the aluminum base.

You speak of soldering lugs and reinforcements to it, but it has been my understanding that aluminum cannot be soldered.—V. C. SMEDLEY.

Sensitive Dentine

Q.—I have an unusual case. One of my patients has an upper right central which has two silicate restorations in mesial and distal and an alloy restoration in the lingual side. This patient complains that this tooth hurts him when he goes a long time without a drink of water or when perspiring freely. Otherwise it seems normal. It is vital to a pulp tester.—W. J. S., Virginia.

A.—The problem presented in your letter has received a good deal of consideration and we have no solution. It would be wise to examine carefully for leaks around, or decay under the restorations or new cavities, if you have not already done this.—GEORGE R. WARNER.

DENTAL MEETING DATES

Tenth Annual Gold Tournament of the University of Pennsylvania Dental Alumni Society, Overbrook Country Club, Philadelphia, June 3, at 1:30 P. M.

Missouri-Kansas joint meeting, New Municipal Auditorium, Kansas City, May 16-19.

Indiana State Dental Association, annual convention Claypool Hotel, Indianapolis, May 17-19.

The Great Swampscott Convention, New Ocean House, Swampscott, Massachusetts, June 7-9.

New York University College of Dentistry, fourth annual postgraduate course in Periodontia, June 21. For information address Periodontia Department, New York University College of Dentistry, 209 East 23rd Street, New York City.

American Academy of Periodontology, twenty-fourth annual meeting, Claridge Hotel, Atlantic City, New Jersey, July 8-10.

American Dental Assistants Association, thirteenth annual meeting, Atlantic City, New Jersey, July 12-16.

American Dental Hygienists Association, annual meeting, Atlantic City, New Jersey, July 12-16.

Association of American Women Dentists, sixteenth annual meeting, Atlantic City, New Jersey, July 12-16.

American Dental Association, annual meeting, Atlantic City, New Jersey, July 12-16.

American Society for the Promotion of Dentistry for Children, Hotel Chelsea, Atlantic City, New Jersey, July 12.

American Dental Society of Europe, annual meeting, Paris, France, August 2-5.

STATE BOARD EXAMINATIONS

Board of Dental Examiners of California, next examination, San Francisco, commencing on May 24 at Physicians and Surgeons College of Dentistry, 344 14th Street; in Los Angeles, Room 804 City Hall, commencing on June 21. All credentials must be in the office of the Secretary at least 20 days prior to the examinations. Address all applications to Doctor Kenneth I. Nesbitt, 450 McAllister Street, San Francisco.

Board of Dental Examiners of Mississippi, annual examination, third Tuesday in June (June 15 and continuing for two or three days, as may be necessary.) All applications must be in the hands of the Secretary on or before June 1. Address Doctor A. B. Kelly, P.O. Box 224, Yazoo City, Mississippi, for information.

VITAMIN REQUIREMENTS OF MAN

III. VITAMIN A

● The importance and multiple functions of vitamin A in human nutrition are widely dealt with in clinical literature. Xerophthalmia resulting from severe vitamin A deficiency is rare in this country, yet the etiology of many pathogenic conditions, namely, night-blindness, urinary calculi, lesions of the nervous system, impairment of epithelial tissue and subnormal growth, has been linked with chronic avitaminosis A (1).

Minimum human requirements for vitamin A are influenced by such variables as size of the individual and efficiency of absorption. The minimum daily requirement of infants has been estimated at 1500 International units, based upon the vitamin A content of milk. The need for the vitamin is not supplied by 1200 International units, while 2000 International units appear to be sufficient (2).

Although the minimum requirement of the adult has been estimated to be as low as 500 International units, the optimum level for both older children and adults is probably between 3000 and 5000 International units per day (3). The League of Nations Technical Commission recommends over 5000 International units of vitamin A for the pregnant and for the lactating woman (4).

Since the human requirement is evidently high, it is fortunate that vitamin A and carotene (pro-vitamin A) are more or less widely distributed in natural foods. Outstanding sources are some of the highly pigmented fruits and vegetables—especially the yellow varieties—and also dairy and marine products (5).

These protective foods, preserved by modern commercial canning, are readily available in all parts of the country throughout the year. It has been repeatedly demonstrated that commercially canned foods retain their vitamin A potency to a high degree (6). The vitamin A potencies of certain commercially canned products have been recently reported in International units (7). From these reports it is apparent that commercially canned foods can be relied upon to supply quantities of vitamin A entirely consistent with the vitamin A of the raw product.

AMERICAN CAN COMPANY
230 Park Avenue, New York City

(1) a. 1935. J. Am. Med. Assn. 105, 1608
b. 1936. Ibid. 106, 996
(2) 1934-35. Am. Pub. Health Assn. Year Book, Page 70.
(3) a. 1934. J. Am. Diet. Assn. 10, 296
b. 1936. Indian J. Med. Research 23, 741
(4) 1936. League of Nations Report on Physiological Bases of Nutrition, League of Nations Publication Department, Geneva.
(5) 1933. Chemistry of Food and Nutrition. H. C. Sherman. 4th Ed. Page 364. MacMillan. New York.
(6) a. 1931. J. Nutrition 4, 267
b. 1933. J. Am. Diet. Assn. 9, 295
c. 1936. J. Nutrition 11, 383
(7) a. 1935. J. Home Econ. 27, 658
b. 1933. Georgia Expt. Sta. Bull. No. 177
c. 1936. J. Am. Diet. Assn. 12, 231

This is the twenty-fourth in a series of monthly articles, which will summarize, for your convenience, the conclusions about canned foods which authorities in nutritional research have reached. What phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles. Address a post card to the American Can Company, New York, N. Y.